

**Notice of Allowability**

Application No.

10/676,522

Examiner

X. L. Bautista

Applicant(s)

WAYNE T. MANSELL ET AL

Art Unit

2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 8/21/06.
2. ☒ The allowed claim(s) is/are 51-68.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

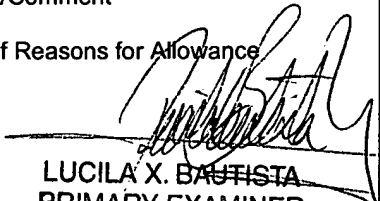
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 9/11/06
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

  
LUCILA X. BAUTISTA  
PRIMARY EXAMINER

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Thedford I. Hitaffer on 28 September 2006.

The application has been amended as follows:

#### In the claims

Claim 51, lines 5-7, amend as follows:

a program controller including a display having a displayed menu that displays a plurality of menu selection items, the program controller being responsive to the input device for selectively changing the arrangement of menu selection items on the displayed menu of the display without changing the programming of the controller and for selectively causing the controller to operate the plurality of modules.

Claim 52, line 6, amend as follows:

a control system that is programmed to control ~~controls~~ the output device, the control system comprising:

Claim 52, line 11, amend as follows:

~~configurable~~ being configured to change the arrangement of menu selection items in the menu structure without the need for programming in code.

***Reasons for Allowance***

2. Claims 51-68 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Independent claims 51, 52 and 62 have been carefully considered. Prior art of record fails to teach the combination of claimed elements including a wheelchair having a controller for operating a plurality of modules; the wheelchair having a display screen for displaying a menu and submenus, the controller and the input device for enabling a user to configure the menu without needing any programming skills as recited in claims 51 and 52; the wheelchair having a control system for moving menu items from a submenu to the main menu, and for controlling the wheelchair's power seat actuator and the drive wheel motor; and the actuator for causing the power seat system to tilt, lift or recline as recited in claim 62.

*Littlejohn et al* (US 5,003,000) discloses a motorized wheelchair having a removable and programmable memory to enable a user to operate the wheelchair, which contains constants for use in an algorithm that operates the wheelchair in accordance with the needs of a particular user. Control signals from an input are modified by the algorithm in accordance with the prescription for the particular user. Littlejohn teaches that the prescription is stored in the programmable memory and loaded into the computer. A first processor is used for operating the algorithm and controlling the wheelchair motors and a second command processor

is used for controlling a display panel receiving the inputs and modifying the inputs in accordance with the prescription. A control panel has a display screen and push buttons, the display screen having icons for displaying icons representing functions or status of the wheelchair. Littlejohn fails to teach or suggest that the control system has a menu structure that can be configured by the user without needing any programming skills and that the menu elements enable the user to control the wheelchair.

*Roth* (US 6,266,060 B1) discloses an interface that continuously customizes a menu and that displays menu items that are used more often avoiding the need to frequently navigate through seldom-used objects of the menu. Roth explains that users are provided with a flexible and efficient menu arrangement that displays only those items that the user uses more often and with the order of past user selections such that only the most recently or frequently used items will be displayed. Roth fails to teach or suggest that the interface having that the configurable menu can be used to display objects for enabling a user to control the wheelchair.

*Rice* (US 5,345,226) discloses an environmental control system having a user interface that is programmable and has a menu structure. The system provides a user control with a small number of positions that can be easily operated by any user and a plurality of modules. Rice teaches functions that can be programmably

assigned by the user. Rice explains that the control system enables the user to control accessories external to the wheelchair but it fails to teach or suggest that the wheelchair has a configurable menu that allows a user to control the wheelchair and that can be customized by a user having no programming skills.

*Wakefield, II* (US 6,871,122 B1) discloses a method of adjusting parameters of a power wheelchair for a plurality of drive programs for operating the wheelchair, each drive having multiple performance parameters. Wakefield teaches a handheld device that communicates with a controller for entry of performance parameter values or settings. Wakefield teaches a menu but fails to teach or suggest that a user having no programming skills is enabled to configure the menu structure.

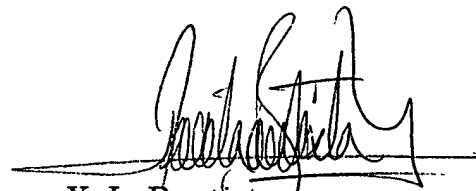
### ***Conclusion***

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to X. L. Bautista whose telephone number is (571) 272-4132. The examiner can normally be reached on Tuesday-Friday 8:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



X. L. Bautista  
Primary Examiner  
Art Unit 2179

xlb  
September 22, 2006